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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/890,168	10/30/2001	Tomio Echigo	954-010444-U	7706
2512	7590	05/18/2004	EXAMINER	
PERMAN & GREEN 425 POST ROAD FAIRFIELD, CT 06824			FOULADI SEMNANI, FARANAK	
			ART UNIT	PAPER NUMBER
			2672	9

DATE MAILED: 05/18/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/890,168

Applicant(s)

ECHIGO ET AL.

Examiner

Faranak Fouladi

Art Unit

2672

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 25 February 2004.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-6 and 8-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 and 8-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- 1) ☐ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

1. This action is responsive to communications: application, filed on 10/30/2001; Amendment A, filed 02/27/04.
2. Claims 1-6, 8-20 are pending in the case, with claims 1-6, 8, 9, and 20 being independent.
3. Claim 7 has been cancelled.
4. The present title of the application is "METHOD AND DEVICE FOR DESCRIBING VIDEO CONTENTS" (as originally filed).
5. **THIS ACTION IS MADE FINAL.**

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35

U.S.C. 102 that form the basis for the rejections under this section made in this

Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-6 and 8-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Dimitrova et al. [Rx for semantic video database retrieval, Proceedings of the second ACM international conference on Multimedia, Pages: 219 - 226, Year of publication 1994].

7. Regarding independent claim 1, "a description means for contents of motion picture, said means comprising of:
- (a) means for setting reference plane;
  - (b) means for describing each object on said motion picture by positioning on said reference plane and predefined type of actions; and
  - (c) means for describing each scene by using said means for describing each object." Dimitrova disclose means for setting reference plane in sec. 3.1 page 220 – page 221. Dimitrova also disclose describing each object by positioning on said reference plane and predefined type of actions in first paragraph of sec. 3.2 page 222; and further he disclose means for describing each scene by using said means for describing each object in third paragraph of sec. 3.3 page 223.
8. Regarding independent claim 2, " a search means for contents of motion picture, said means comprising of:
- (a) means for setting reference plane;
  - (b) means for describing each object on said motion picture by positioning on said reference plane and predefined type of actions; and
  - (c) means for describing each scene by using said means for describing each object; and
  - (d) means for searching motion picture by using said means for describing each object or said means for describing each scene." Parts (a), (b) and (c) are similar to claim 1 and therefore are rejected under the same rationale. Regarding part (d), Dimitrova disclose in first paragraph of sec. 3.3 page 223.

9. Regarding independent claim 3, "a description method for motion picture, said method comprising the steps of:
- (a) determining reference plane which represents information of object positions included in said motion picture;
  - (b) representing changes over time of each object on said reference plane as a trajectory;
  - (c) setting a description unit based on predefined type of actions of each object by using changes in shape of each object so as to assign actions of each object as each behavioral section; and
  - (d) defining each scene by plural objects." Dimitrova disclose means for setting reference plane in sec. 3.1 page 220 – page 221, and Dimitrova also discloses parts (b), (c), and (d) in sec. 3.3 (the whole section) page 223.
10. Regarding independent claim 4, "a search method for motion picture, said method comprising the steps of:
- (a) setting reference plane which represents information of object positions included in said motion picture;
  - (b) representing changes over time of each object on said reference plane as a trajectory;
  - (c) setting a description unit based on predefined type of actions of each object by using changes in shape of each object so as to assign actions of each object as each behavioral section; and
  - (d) defining each scene by plural objects; and

(e) searching a specific scene by using said actions of each object or said scene." Parts (a), (b), (c) and (d) are similar to claim 3 and therefore are rejected under the same rationale. Regarding part (e), Dimitrova disclose in 2<sup>nd</sup> col. Lines 20-23 of sec. 4 page 224.

11. Regarding independent claim 5, "a description method for motion picture, said method comprising the steps of:

- (a) determining reference plane from said motion picture;
- (b) cutting a region map, an object trajectory ID, an action ID and a camera parameter from said motion picture;
- (c) creating description of actions by each object from said region map, said object trajectory ID, said action ID and said camera parameter; and
- (d) creating description of scenes by using said description of actions by each object. Dimitrova disclose part (a) in sec. 3.1 page 220 – page 221 and disclose part (b), (c), and (d) in 1<sup>st</sup> col. of sec. 4 page 224 – line 24 of 2<sup>nd</sup> col. page 224 (same page).

12. Regarding independent claim 6, "a search method for motion picture, said method comprising the steps of:

- (a) determining reference plane from said motion picture;
- (b) cutting a region map, an object trajectory ID, an action ID and a camera parameter from said motion picture;
- (c) creating description of actions by each object from said region map, said object trajectory ID, said action ID and said camera parameter;

(d) creating description of scenes by using said description of actions by each object; and

(e) searching a specific scene by using said description of actions by each object or said description of scenes." Dimitrova disclose part (a) in sec. 3.1 page 220 – page 221 and disclose part (b), (c), (d) in 1<sup>st</sup> col. of sec. 4 page 224 – line 24 of 2<sup>nd</sup> col. page 224 (same page) and (e) in 2<sup>nd</sup> col. of introduction page 219 lines 6-11.

13. Regarding independent claim 7, "a description method for motion picture, said method comprising the steps of:

(a) cutting a region map, an object trajectory ID, an action ID and a camera parameter from said motion picture;

(b) creating description of actions by each object from said region map, said object trajectory ID, said action ID and said camera parameter; and

(c) creating description of scenes by using said description of actions by each object." Dimitrova disclose part (a), (b) , and (c) in 1<sup>st</sup> col. of sec. 4 page 224 – line 24 of 2<sup>nd</sup> col. page 224 (same page).

14. Claim 8 is similar to claim 6 and therefore is rejected under the same rational.

15. Claim 9 recite a computer readable storage medium which has recorded program containing executable instructions executing the method of claim 3. It is inherent to have a medium configured to store or transport computer readable code in a computer system. For example compact disc has been included and used in the computer systems since 1990s or magnetic data storage devices have been

used since 1980s. Also Dimitrova discloses a software application in sec. 5 lines 38-46 page 226.

16. Regarding dependent claims 10-19 Dimitrova disclose in abstract classifying objects appearing in a video sequence based on the movements of each object as well as their other characteristics and features such as shape and color.
17. Regarding independent claim 20, parts (a), (b), (c) and (d) are similar to claim 3 and therefore are rejected under the same rationale. Regarding part (e), Dimitrova disclose in 2<sup>nd</sup> col. Lines 20-23 of sec. 4 page 224.

#### ***Response to Amendment***

18. The amendment filed on 02/25/04 has been entered, however amendment to claim 6 does not include all changes to the claim. Amendment to claim 6 include the word "search" in the first line without any markings to the text. Amendments to the claims filed on or after July 30, 2003 must comply with 37 CFR 1.121(c).

#### ***Response to Arguments***

19. Applicant's arguments filed 02/25/04 have been fully considered but they are not persuasive.

Applicant argues on last four lines of page 11- line 3 of page 12 of amendment that "...the description of motion of an object depends on camera motion."

Examiner disagrees. Dimitrova disclose in abstract and in introduction analyzing motion of objects and extracting information that is unique to the video



sequences based on the movements of each object, as well as their other characteristics and features.

***Conclusion***

**20. THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

**21.** Any this communication or earlier communications from the examiner should inquiry concerning be directed to **Faranak Fouladi** whose telephone number is **703-305-3223**. The examiner can normally be reached on Mon-Fri from 8:00-4:30.

**22.** If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Michael Razavi** can be reach at **703-305-4713**.

**23.** Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, DC. 20231

**Or faxed to: 703-872-9306 (for Technology Center 2600 only)**

24. Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, sixth-floor (Receptionist).

25. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is 703-306-0377.

**Faranak Fouladi-Semnani**  
**Patent Examiner**  
**Art Unit 2672**

A handwritten signature in black ink, appearing to read 'M. Razavi', with a long horizontal line extending to the right.

**MICHAEL RAZAVI**  
**SUPERVISORY PATENT EXAMINER**  
**TECHNOLOGY CENTER 2600**